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Suggestions for Weed Control in Peanuts

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The suggestions contained herein are based primarily on herbicide labels, review by manufacturer representatives, research by the Texas Agricultural Experiment Station and demonstrations by the Texas Agricultural Extension Service. Information appears in abbreviated form. This publication is no substitute for the product label. Always review herbicide labels carefully for additional details on specific uses of each product. These labels change frequently and, therefore, this publication may not be entirely current.

The use of product names is not intended as an endorsement of the product or of a specific manufacturer, nor is there any implication that other formulations containing the same active chemical are not equally as effective. Product names are included solely to aid readers in locating and identifying the herbicides suggested.

Information in this publication appears in abbreviated form. Review product label for more details on specific uses.

The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Texas Agricultural Extension Service is implied.

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Weeds can be controlled in cropland through cultural, mechanical and chemical means. Wise use of these individual methods or a combination of them can result in effective weed management without causing economic loss or harming the environment. Deciding which practice to use will depend largely on the weed(s) being controlled and the infestation level. Also, the crop being planted will play a major role in determining when to use mechanical measures.

Considerations for cultural and mechanical weed control include:

1. Remove light or spotty infestations of weeds by hand hoeing or spot cultivation to prevent spreading weed seed, rhizomes or roots. This is particularly important with perennial weeds because of the way in which they propagate (by seed and root tissue). However, also exercise caution when plowing perennial weeds, being careful to prevent the transport and spread of plant parts to other areas of the field.

2. Use weed-free planting seed to protect against weed infestations in the row and the introduction of new weed species.

3. Thoroughly clean harvesting equipment before moving from one field to the next, or require it of the custom harvesters before they enter your fields.

4. Use mechanical tillage to remove initial weed flushes before planting, thereby eliminating or at least reducing the potential for continued infestation.

5. Consider the economics of using mechanical cultivation alone for weed control in the crop, especially where annual weed infestations are light.

6. Practice rotation to crops that physically out-compete certain weeds, resulting in their gradual decline. Consider crop rotation also when chemical methods are labeled only for certain crops.

Weed species listed in the “weeds controlled” columns of these tables are taken from herbicide labels. The degree of control herbicides achieve depends on the application rate, amount and timing of rainfall, soil type and infestation levels of the various weeds.

Cultivating peanuts: Because of their growth habit, peanuts are not well-suited for conventional cultivation methods. Moving soil onto peanuts causes several problem situations:

1. The lower nodes of the lowest lateral branches will be covered with soil, inhibiting normal flower, peg and pod set.

2. Soil thrown to the crown and lateral portions of the peanut plant creates favorable conditionsfor southern blight development and other diseases. Cultivate only for weed control; sweeps should be operated flat and shallow, removing the weeds without “dirting” the plants.

Table 1. Preplant treatments

Weeds controlled	Product (Herbicide common name) Company	Application rate per acre	Time to apply	Remarks
Several annual and perennial grasses and broadleaf weeds	**Roundup Ultra®** (glyphosate) Monsanto	0.5 to 5.0 qts.	Apply before planting.	Apply when weeds are growing vigorously Consult label for specific rate and height restriction for weeds. For maximum agronomic benefit, apply when weeds are 6 inches or less in height. For aerial applications, do not apply during inversion conditions, when winds are gusty or under other conditions that allow drift. Do not apply by ground when winds are gusty or more than 5 mph. Do not store, mix or spray in galvanized or unlined steel tanks except stainless steel. Do not mix with any residual pesticide. Allow at least 3 days before tillage.

Table 2. Preplant incorporated and preemergence treatments

Weeds controlled	Product (Herbicide common name) Company	Application rate per acre	Time to apply	Remarks
Several annual grasses and small-seeded broadleaf weeds	**Treflan HFP®** (trifluralin) DowAgroSciences	1 pt.	Preplant soil incorporated	Do not delay incorporation more than 24 hours after treatment.
	Prowl 3.3EC® (pendimethalin) BASF	1.2 to 2.4 pts.	Preplant soil incorporated	Prowl® is to be incorporated within 7 days of application.
	Sonalan HFP® (ethalfluralin) DowAgroSciences	1.5 to 2 pts. (coarse soil); 2.0 to 2.5 pts. (fine soil)	Preplant soil incorporated	Do not delay incorporation more than 48 hours after treatment.

Table 2. Preplant incorporated and preemergence treatments (continued)

Weeds controlled	Product (Herbicide common name) Company	Application rate per acre	Time to apply	Remarks
Yellow and purple nutsedge, a few selected grasses and several broadleaf weeds	**Pursuit DG®** (imazethapyr) BASF	1.44 oz.	Preplant soil incorporated or preemergence	Shallow incorporation (1-2 inches) preferable. May be tank mixed with Prowl®, Sonalan®, Treflan® or Dual®. **Not labeled for preplant incorporated or preemergence applications in West Texas; wait until late-cracking when most of the crop has emerged.** Incorporated treatments are more persistent than preemergence or postemergence applications. Rotation interval for cotton and sorghum is 18 months. Do not apply more than 1.44 oz. per acre, per growing season. Preemergence applications depend on rainfall or irrigation for activation.
Several annual grasses, a few small-seeded broadleaf weeds and yellow nutsedge	**Dual Magnum®** **Dual II Magnum®** (s-metolachlor) Sygenta	0.8 to 1.33 pts.	Preplant incorporated, postplant incorporated, preemergence	Controls some annual and small-seeded broadleaf weeds. Does not control Texas panicum. Either rainfall or irrigation is needed for effective results from preemergence treatments. A preplant incorporated treatment will be more effective for yellow nutsedge control. Injury may occur after the use of Dual II Magnum® or Dual Magnum® if it is incorporated too deeply or unusually high rainfall moves the herbicide into the germination zone. May be tank mixed with Treflan®, Sonalan®, Prowl® or Pursuit®. Consult the label for specific rates and restrictions.
Annual grasses, small-seeded broadleaf weeds and yellow nutsedge	**Frontier 6.0®** **Outlook 6.0®** (dimethenamid) BASF	20 to 32 oz.	Preplant incorporated, preemergence	Same as above.

Table 2. Preplant incorporated and preemergence treatments (continued)

Weeds controlled	Product (Herbicide common name) Company	Application rate per acre	Time to apply	Remarks
Cocklebur, lambsquarters, common ragweed, devil's-claw, prairie sunflower, golden crownbeard, morningglory, pigweed, teaweed, spurred anoda, tropic croton, velvetleaf, copperleaf, eclipta, yellow and purple nutsedge, smartweed	**Strongarm 84 WG®** (diclosulam) DowAgroSciences	0.45 oz.	Preemergence from 5 days after planting through "at cracking" stage of growth.	Do not apply more than 0.45 oz. per acre per growing season. Do not apply Strongarm® to soils with a pH of 7.2 or greater.

Table 3. At cracking or early postemergence treatments

Weeds controlled	Product (Herbicide common name) Company	Application rate per acre	Time to apply	Remarks
Yellow and purple nutsedge, a few annual grasses and several broad-leaf weeds	**Pursuit DG®** (imazethapyr) BASF	1.44 oz.	At-crack (10-14 days after planting). Early postemergence.	If weeds have emerged, surfactant should be added at 1 qt./100 gals. spray solution or crop oil concentrate at 1 qt./acre. The addition of nitrogen fertilizer may improve control. Can be tank mixed with 2,4-DB for broader spectrum control of emerged broadleaf weeds. In West Texas, delay application until late cracking, when most of the crop has emerged. 18-month rotation restriction for cotton and sorghum.

Table 3. At cracking or early postemergence treatments (continued)

Weeds controlled	Product (Herbicide common name) Company	Application rate per acre	Time to apply	Remarks
Several annual grasses, a few small-seeded broadleaf weeds and yellow nutsedge	**Dual II Magnum®** **Dual Magnum®** (s-metolachlor) Sygenta	0.8 to 1.33 pts.	Same as above or layby after the last normal cultivation.	Use as a supplement to preplant incorporated treatments to provide additional residual control of annual grasses and selected small-seeded broadleaf weeds. Dual Magnum® or Dual II Magnum® will not control emerged grasses or weeds. Once peanuts have emerged, the risk of injury from Dual Magnum® is greatly reduced. Shallow mechanical cultivation, rainfall or irrigation shortly after application is required to activate Dual Magnum®.
Several annual broadleaf weeds and partial control of yellow and purple nutsedge	**Tough 3.75 EC®** **Tough 5 EC®** (pyridate) Sygenta	2 to 3 pts. 1.5 to 2 pts.	Same as above.	Provides contact control of certain broadleaf weeds. Peanuts are tolerant to Tough® at all growth stages. Tough® can be tank mixed with Dual II Magnum® or Dual Magnum® for residual weed control, or 2,4-DB for improved weed control. Spray additives are not needed with Tough®. Tough® does not provide adequate control of Palmer amaranth. Eclipta should be treated when less than 2 inches tall; copperleaf should be less than 6 inches tall.

Table 4. Postemergence treatments

Weeds controlled	Product (Herbicide common name) Company	Application rate per acre	Time to apply	Remarks
Several annual broadleaf weeds	**2,4-DB 175®** **2,4-DB 200®** (2,4-DB) Several manufacturers	0.9 to 1.8 pts. 0.8 to 1.6 pts.	Postemergence when weeds are 1 to 4 inches tall.	Use the low rate on morningglory and cocklebur up to 12 inches in size, use the high rate on other weeds. Treatment may be made twice during the season. Do not apply within 30 days of harvest. Do not allow this herbicide to drift on to cotton because severe injury can occur. Do not apply if peanuts are under moisture stress as injury may occur. **Do not feed vines and peanut hay to livestock.** Sandhills amaranth and tumble pigweed are not controlled.
Several annual broadleaf weeds and yellow nutsedge	**Basagran®** (bentazon) BASF	1 to 2 pts.	Postemergence to weed seedlings when peanut growth stages are bunching to pegging.	See label for weed leaf stage for each weed and other details. Treat when broadleaf weeds are small and actively growing. Does not control grasses. For yellow nutsedge, two applications are preferred. When plants are 6 to 8 inches tall, apply 1 pt. per acre. If needed, make second application 7 to 10 days later. Use 1 pint/acre of crop oil concentrate with Basagran®. Do not use more than 2 pints of Basagran® per acre in one season.
Annual broadleaf weeds, yellow and purple nutsedge and selected grasses	**Cadre DG®** (imazapic) BASF	1.44 oz.	Early postemergence to small weeds, generally less than 4 inches tall.	Peanuts should be emerged before making Cadre® application. Do not apply if peanuts are under stress. Cadre® will provide residual soil activity when activated by rainfall, irrigation or shallow cultivation. Cadre® may cause yellowing and reduced vine growth. Always use a nonionic surfactant or crop oil concentrate. Addition of nitrogen fertilizer may improve control. 18-month crop rotation restriction for cotton and sorghum.

Table 4. Postemergence treatments (continued)

Weeds controlled	Product (Herbicide common name) Company	per acre	Application rate Time to apply	Remarks
Several annual broadleaf weeds	**Blazer 2L®** **Ultra Blazer 2L®** (acifluorfen) BASF	1 to 1.5 pts.	When weeds are in 2- to 6-leaf stage, consult label for specific treatment instructions.	Blazer® and Ultra Blazer® work primarily by contact; therefore, good coverage is essential. Do not apply more than 2 pts. of Blazer® or Ultra Blazer® per season. Do not apply these products within 75 days of harvest. Eclipta should be treated when less than 2 inches tall; copperleaf should be less than 6 inches tall. Can be tank-mixed with 2,4-DB for improved weed control. Always use a nonionic surfactant or crop oil concentrate. Blazer® and Ultra Blazer® will cause spotting and bronzing of peanut leaves. **Do not use treated plants for feed or forage.**
Weeds listed for Blazer® plus beggar-ticks, cocklebur, dayflower, spurred anoda, yellow nutsedge, coffee senna, giant ragweed, sunflower and velvet leaf	**Blazer 2L®** + (acifluorfen) **Basagran 4E®** (bentazon) **OR** **Storm®** (prepackaged mix of Blazer® + Basagran®) BASF	1 to 1.5 pts. 1 to 2 pts. 1.5 pts.	See weed growth stages listed on the label, but generally 2- to 8-leaf stage.	Follow label directions and restrictions for both herbicides. **Do not use treated plants for feed or forage.**

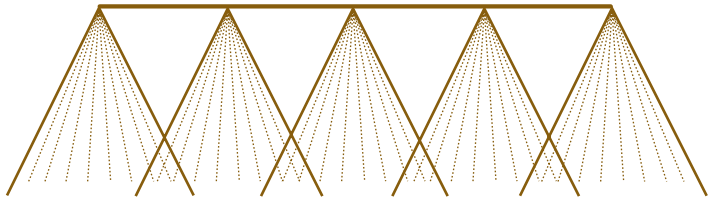
Table 4. Postemergence treatments (continued)

Weeds controlled	Product (Herbicide common name) Company	Application rate per acre	Time to apply	Remarks
Annual and perennial grass weeds	**Poast Plus®** (sethoxydim) BASF	1.5 to 2.25 pts.	Postemergence over the top of actively growing grasses. See label for treatment of grasses at various growth stages.	Do not apply to grasses under stress from lack of moisture or other adverse growing conditions, otherwise unsatisfactory control may result. Bermudagrass and rhizome Johnsongrass may require two applications (see label). Do not apply to peanuts within 40 days of harvest. **Treated peanut forage or hay cannot be fed to livestock.** Maximum height for rhizome Johnsongrass treatment in southeast Texas is 25 inches; 10 inches in High Plains and Rolling Plains. Bermudagrass runners should not exceed 6 inches.
Annual and perennial grasses	**Select 2 EC®** (clethodim) Valent	8 to 16 oz.	Postemergence over the top of actively growing grasses	See label for treatment of grasses at various growth stages. Add 1 qt./acre of crop oil concentrate. Avoid contact with corn, sorghum and small grain plants. Do not apply to peanuts within 40 days of harvest.

Table 5. Product, common and chemical name of herbicides

Trade Name	Common name	Formulation	Manufacturer
2,4-DB®	2,4-DB	2 lbs./gal and 1.75 lbs./gal.	Several
Basagran®	bentazon	4 lbs./gal.	BASF
Blazer®, Ultra Blazer®	acifluorfen	2 lbs./gal.	BASF
Cadre DG®	imazapic	0.125 lb./soluble packet	BASF
Dual® and Dual II®	metolachlor	8 lbs./gal.	Sygenta
Dual II Magnum®, Dual Magnum®	s-metolachlor	7.64 lbs./gal.	Sygenta
Frontier®, Outlook®	dimethenamid	6 lbs./gal.	BASF
Poast Plus®	sethoxydim	1 lb./gal.	BASF
Prowl®	pendimethalin	3.3 lbs./gal.	BASF
Pursuit DG®	imazethapyr	0.125 lb./soluble packet	BASF
Roundup Ultra®	glyphosate	4 lbs./gal.	Monsanto
Select 2 EC®	clethodim	2 lbs./gal.	Valent
Sonalan HFP®	ethalfluralin	3.0 lbs./gal.	DowAgroSciences
Storm®	bentazon + acifluorfen	2.67 lbs./gal. + 1.33 lbs./gal.	BASF
Strongarm®	diclosulam	84% active ingredient	DowAgroSciences
Tough®	pyridate	3.75 lbs./gal. and 5 lbs./gal.	Sygenta
Treflan HFP®	trifluralin	4 lbs./gal.	DowAgroSciences

Boom Sprayer Calibration



1. Determine nozzle spacing.
2. Refer to the table below for length of calibration course.
3. Mark off the calibration course on the actual area to be sprayed.
4. Record the time required to drive calibration course at desired field gear and rpm to be used while spraying.
5. Park tractor, maintain rpm used to drive course, turn on the sprayer and set at the proper pressure for desired nozzle tips.
6. Catch water from one nozzle for the time equal to that required to drive the calibration course.
7. Ounces of water caught = gallons per acre.
8. Divide gallons per acre into the number of gallons in spray tank to determine how many acres will be sprayed. Add appropriate amount of herbicide for number of acres to be sprayed.

Chart for Nozzle Spacing and Length of Calibration Course

Nozzle Spacing (inches)	18	20	30	40
Length of Calibration Course* (linear feet)	227	204	136	102

*To determine the calibration course for a nozzle spacing not listed, divide the spacing expressed in feet into 340 (340 sq. ft. = 1/128 of an acre).

Example: Calibration distance for 19-inch nozzle spacing = 340 ÷ 19/12 = 215 feet).

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